

CLAIMS

I claim as my invention:

1. A weigh system for use on beds comprising:
 - a pair of scales,
 - each scale comprising,
 - a beam type load cell each load cell comprising
 - a deflectable beam portion;
 - means for measuring and transmitting deflection of said beam portion;
 - a horizontally disposed floor engaging base;
 - a support bar positioned above and attached to said load cell;
 - two support bar extensions adjustably attached to said support bar such that the width of said scale can be readily adjusted to accommodate beds of varying widths;
 - each of said support bar extensions adapted for placing the support structure of a bed thereon;
 - said leg pad adapted for placing the support structure of a bed thereon
 - and said wheel cup adapted for placing the support structure of a bed therein;
 - a weight data collector attached to said load cells;
 - whereby one of said pair of scales is positioned under the head of a bed and the other of said pair of scales is positioned under the foot of said bed, said support bar extensions are adjusted so that the legs of said bed rest on said leg pads or so that the

wheels of said bed rest in said wheel cups, deflection of said beam portions of said beam shaped load cells is measured by said means for measuring deflection of said beam portion, said deflection measurement is transmitted to said weight data collector; and

based on said deflection, said weight data collector calculates and displays the weight of said bed and any person therein.

2. The weigh system of claim 1 wherein said means for measuring and transmitting deflection of said beam portion is a strain transducer.

3. The weigh system of claim 1 wherein said weight data collector displays only the weight of any person in said bed.

4. The weigh system of claim 1 wherein said support bar extensions further comprise a leg pad, and a wheel cup; said leg pad adapted for placing the support structure of a bed thereon, and said wheel cup adapted for placing the support structure of a bed therein.

5. A weigh system for use on beds comprising:

a pair of scales,

each scale comprising,

a beam type load cell each load cell comprising a deflectable beam portion, said beam portion having an upper surface and two threaded holes on said upper surface, said threaded holes being spaced such that one is near each end of said beam

portion;

strain transducers for measuring and transmitting deflection of said beam portion;
a horizontally disposed floor-engaging base, said base being longer and wider than said beam portion;

a support bar positioned above said load cell, said support bar being longer than said beam portion of said load cell and having a top surface a bottom surface and two side surfaces;

said support bar having two fastener holes communicating through said support bar from said top surface to said bottom surface, said fastener holes being evenly spaced along the length of said support bar as to correspond to said threaded holes on said beam portion of said load cell;

said support bar having four adjustment holes spaced along each of said two side surfaces, said adjustment holes being threaded and communicating into said support bar; whereby said support bar is fastened to said beam portion of said load cell with threaded fasteners that are routed through said fastener holes of said support bar and threadedly engaged with said threaded holes of said beam portion of said load cell;

two support bar extensions, each of said support bar extensions having a closed end, an adapter end, a leg pad, and a wheel cup;

said leg pad adapted for placing the support structure of a bed thereon and said wheel cup adapted for placing the support structure of a bed therein;

said wheel cup positioned near said closed end of said support bar extension and said leg pad positioned to adjacent said wheel cup and opposite said closed end of said support bar extension;

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said support bar extension having a pair of extension panels extending from said closed end of said support bar extension and terminating at said adapter end, said extension panels separated by a space that is equal to the width of said support bar; each of said extension panels having a longitudinal slot communicating there through, said longitudinal slot extending from near said adapter end of said support bar extension toward said closed end of said support bar extension and terminating under said leg pads, whereby said support bar extensions are adjustably attached to said support bar, such that the width of said scale can be adjusted to accommodate beds of varying widths, by placing one of said extension panels, of each of said support bar extensions on each side of said support bar, with said leg pads and said wheel cups facing up and said support bar extension positioned such that said closed end of said support bar extension is positioned at the end of said support bar extension that is furthest away from said support bar, fasteners are passed through said longitudinal slots in said extension panels and threadedly engaged with said adjustment holes on the sides of said support bar;

a weight data collector attached to said load cells; whereby one of said pair of scales is positioned under the head of a bed and the other of said pair of scales is positioned under the foot of said bed, said support bar extensions are adjusted so that the legs of said bed rest on said leg pads or so that the wheels of said bed rest in said wheel cups, said strain transducers measure and transmit the deflection in said beam portions of said beam shaped load cells to said weight data collector; and

based on said deflection, said weight data collector calculates the weight of said bed and any person therein.

6. The weigh system of claim 5 wherein said weight data collector displays only the weight of any person in said bed.

7. The weigh system of claim 5 wherein the width of said scale is changed to accommodate beds of various widths by loosening said adjustment fasteners that are routed through said longitudinal slot communicating through said extension panels of said support bar extensions and sliding said support bar extensions toward or away from the center of said support bar until the desired width is achieved and then tightening said adjustment fasteners.

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